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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/069,290A**

**DATE: 01/29/2003**  
**TIME: 14:56:27**

**Input Set : A:\35029-20013.00.txt**  
**Output Set: N:\CRF4\01292003\J069290A.raw**

4 <110> APPLICANT: Kosaka, Masaaki  
 5 Ozaki, Shuji  
 6 Wakahara, Yuji  
 8 <120> TITLE OF INVENTION: EXPRESSION ENHANCER FOR HM1.24 ANTIGEN  
 11 <130> FILE REFERENCE: 350292001300  
 13 <140> CURRENT APPLICATION NUMBER: US 10/069,290A  
**C--> 14 <141> CURRENT FILING DATE: 2003-01-29**  
 16 <150> PRIOR APPLICATION NUMBER: PCT/JP00/05617  
 17 <151> PRIOR FILING DATE: 2000-08-22  
 19 <150> PRIOR APPLICATION NUMBER: JP 2000-38689  
 20 <151> PRIOR FILING DATE: 2000-02-16  
 22 <150> PRIOR APPLICATION NUMBER: JP 11/236007  
 23 <151> PRIOR FILING DATE: 1999-08-23  
 25 <160> NUMBER OF SEQ ID NOS: 26  
 27 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 29 <210> SEQ ID NO: 1  
 30 <211> LENGTH: 1013  
 31 <212> TYPE: DNA  
 32 <213> ORGANISM: Homo sapiens  
 34 <220> FEATURE:  
 35 <221> NAME/KEY: CDS  
 36 <222> LOCATION: (23)...(540)  
 38 <400> SEQUENCE: 1  
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 40 Met Ala Ser Thr Ser Tyr Asp Tyr Cys Arg  
 41 1 5 10  
 43 gtg ccc atg gaa gac ggg gat aag cgc tgt aag ctt ctg ctg ggg ata 100  
 44 Val Pro Met Glu Asp Gly Asp Lys Arg Cys Lys Leu Leu Leu Gly Ile  
 45 15 20 25  
 47 gga att ctg gtg ctc ctg atc atc gtg att ctg ggg gtg ccc ttg att 148  
 48 Gly Ile Leu Val Leu Leu Ile Ile Val Ile Leu Gly Val Pro Leu Ile  
 49 30 35 40  
 51 atc ttc acc atc aag gcc aac agc gag gcc tgc cgg gac ggc ctt cgg 196  
 52 Ile Phe Thr Ile Lys Ala Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg  
 53 45 50 55  
 55 gca gtg atg gag tgt cgc aat gtc acc cat ctc ctg caa caa gag ctg 244  
 56 Ala Val Met Glu Cys Arg Asn Val Thr His Leu Leu Gln Gln Glu Leu  
 57 60 65 70  
 59 acc gag gcc cag aag ggc ttt cag gat gtg gag gcc cag gcc acc 292  
 60 Thr Glu Ala Gln Lys Gly Phe Gln Asp Val Glu Ala Gln Ala Ala Thr  
 61 75 80 85 90  
 63 tgc aac cac act gtg atg gcc cta atg gct tcc ctg gat gca gag aag 340  
 64 Cys Asn His Thr Val Met Ala Leu Met Ala Ser Leu Asp Ala Glu Lys

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65	95	100	105	
67	gcc caa gga caa aag aaa gtg gag gag ctt gag gga gag atc act aca			388
68	Ala Gln Gly Gln Lys Lys Val Glu Leu Glu Gly Glu Ile Thr Thr			
69	110	115	120	
71	tta aac cat aag ctt cag gac gcg tct gca gag gtg gag cga ctg aga			436
72	Leu Asn His Lys Leu Gln Asp Ala Ser Ala Glu Val Glu Arg Leu Arg			
73	125	130	135	
75	aga gaa aac cag gtc tta agc gtg aga atc gcg gac aag aag tac tac			484
76	Arg Glu Asn Gln Val Leu Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr			
77	140	145	150	
79	ccc agc tcc cag gac tcc agc tcc gct gcg gcg ccc cag ctg ctg att			532
80	Pro Ser Ser Gln Asp Ser Ser Ala Ala Pro Gln Leu Leu Ile			
81	155	160	165	170
83	gtg ctg ct gggcctcagc gctctgctgc agtgagatcc caggaagctg gcacatcttg			590
84	Val Leu			
87	gaaggtccgt cctgctcggc tttcgcttg aacattccct ttagtctcatc agttctgagc			650
88	gggtcatggg gcaacacggg tagcggggag agcacgggg agccggagaa gggcctctgg			710
89	agcaggctcg gaggggccat gggcagttc tgggtctggg gacacagtc gggtgaccca			770
90	gggctgtctc cttccagagc ctccctccgg acaatgagtc cccctcttg tctcccaccc			830
91	ttagattggg catgggggtgc ggtgtgggg gcatgtgctg cctgttgta tgggttttt			890
92	ttgcgggggg ggttgcttt ttctgggggtc tttgagctcc aaaaaaaaataa acacttcctt			950
93	ttagggagag cacacctaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaat tcggcggcc			1010
94	gcc			1013
96	<210> SEQ ID NO: 2			
97	<211> LENGTH: 172			
98	<212> TYPE: PRT			
99	<213> ORGANISM: Homo sapiens			
101	<220> FEATURE:			
102	<221> NAME/KEY: SIGNAL			
103	<222> LOCATION: (1)...(1)			
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106	Met Ala Ser Thr Ser Tyr Asp Tyr Cys Arg Val Pro Met Glu Asp Gly			
107	1	5	10	15
108	Asp Lys Arg Cys Lys Leu Leu Leu Gly Ile Gly Ile Leu Val Leu Leu			
109	20	25	30	
110	Ile Ile Val Ile Leu Gly Val Pro Leu Ile Ile Phe Thr Ile Lys Ala			
111	35	40	45	
112	Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg			
113	50	55	60	
114	Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly			
115	65	70	75	
116	Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met			
117	80	85	90	95
118	Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys			
119	100	105	110	
120	Val Glu Glu Leu Glu Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln			
121	115	120	125	
122	Asp Ala Ser Ala Glu Val Glu Arg Leu Arg Arg Glu Asn Gln Val Leu			
123	130	135	140	

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124 Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser  
 125 145 150 155  
 126 Ser Ser Ala Ala Ala Pro Gln Leu Leu Ile Val Leu  
 127 160 165 170  
 130 <210> SEQ ID NO: 3  
 131 <211> LENGTH: 2061  
 132 <212> TYPE: DNA  
 133 <213> ORGANISM: Homo sapiens  
 135 <220> FEATURE:  
 136 <221> NAME/KEY: misc\_feature  
 137 <222> LOCATION: (1)...(2061)  
 138 <223> OTHER INFORMATION: Nucleotide sequence of promoter region of gene  
 139 encoding for HM1.24 protein antigen.  
 141 <221> NAME/KEY: CDS  
 142 <222> LOCATION: (2041)...(2061)  
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 145 actaaaagtc tctgatatgc agaaataatg gcataagctg tctttctgtc tgtccccc 60  
 146 ctctctctc gcctcgctg ccaggcagg aaggcccccc tgtccagtgg acacgtgacc 120  
 147 cacatgacct tacatatcat tggagatgac tcacactt taccctgccc ctttgcttt 180  
 148 gtatccaata aataacagca cagccagaca ttccggggca ctaccagtct ccgcgcattg 240  
 149 ctggtagtgg tccccgggc ccagctgtct tttctttat ctttcgtct tttgtctta 300  
 150 tttctacact ctctcgctgc cgcacacagg gagagacca ctgaccctgt gggctggc 360  
 151 cctacagtaa ttttaaagg aagagcaaca aacttcggt ttgcaggcgt gggactgttt 420  
 152 acagctgcaa aatttagaga ggacatcaat ctattattat ccacattta cagctggga 480  
 153 aatcaatgt aagagaggaa attcatttc ccagaggtgc accaccctgg cctccaatgt 540  
 154 gcaattcatg caatttgtat ttccgaccctg gtcccaaact aaccctaaag ttagcaggcc 600  
 155 agaacagtgc tgctcaaata agtcagctt gtcaaataag tcaggcaaag gtcgtgtctt 660  
 156 tgcacctgga gtcctggca ggctggtagg tccctcctcc tgggacaagt tcaccctcag 720  
 157 aattttcagc aagatcatct cccacagctt gttattggt tcttgggtct aagtatttt 780  
 158 ttgtttatt ggttaaagag atggatccc actctatcac ccaggcttga gtgccgtggc 840  
 159 acaatcatag ctcgctgcag cctcaaactc ctgggctcgat gtatccctc tgccctagcc 900  
 160 tcccagcctc agcctggac cacaggcatg taccaccatg cttggctcta agtggctta 960  
 161 atggggctct tctgagggat gttggagtca gggctgggg ggagttcccc aggcctctg 1020  
 162 ggaggcctgg gctctggact tgacctcgcc tactgtctgg ccctgctgaa aaaaaaaaaa 1080  
 163 aacatggaaa tggcagacat aacagaatct gggctgtgtt caggatgtgg ctgaagaagc 1140  
 164 cacaagaaaa acatgcagtc cccttcagc ggtcatgccc agcagttggg tgccgataat 1200  
 165 gggctgttcc tcctgttaga agccctggct ctcttggcca catggacagt gtctgaggct 1260  
 166 ggcctgttta ttccccctt cagatgaaga aacaggctca gagagttac ctggtatcc 1320  
 167 ggagtccctg gagcacttt tcttggaa gggctgttt tcctgcagg gccaagacag 1380  
 168 agaccgacat tgtttggat ctgggttgtt ctcccagttt tcagctggct ccagtctc 1440  
 169 ctgttgcata cacaccctcc atgtctccca tagccctc ggtggggaca gaggcactgg 1500  
 170 atgaagccct gtcgtcacc acagagacac ctgaacacaa aaaccagtcc ctggggctc 1560  
 171 acccaggccc cgccccccaga cccaggccct gccctcactc caccacgca ctgtcaacc 1620  
 172 tcagtttccc caggtggaga ccggaccaac aatgatggcc tctgccttt caggtcatag 1680  
 173 tacagatgaa tacaggctgg cacggcctag gcactcgtt acacacggca gaggcacagg 1740  
 174 gacttaagat ggagtgtccc aggcagccac agttggctgg caccctgtt ggaaggccc 1800  
 175 aaggcctttt aaagcagggt gaaaaaaaaa gcccacctcc tttctggaa actgaaactg 1860  
 176 aaaacctaata taatcctctg cctgttaggtt cctcatgcaa gagctgtgg tcagagact 1920  
 177 tcctgaaact tgctattggt caggacgttt cctatgctaa taaagggtt gcccgttagaa 1980

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178 gattccagca ccctcccccta actccaggcc agactccttt cagctaaagg ggagatctgg 2040
179 atg gca tct act tcg tat gac 2061
180 Met Ala Ser Thr Ser Tyr Asp
181 1 5
184 <210> SEQ ID NO: 4
185 <211> LENGTH: 7
186 <212> TYPE: PRT
187 <213> ORGANISM: Homo sapiens
189 <400> SEQUENCE: 4
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191 1 5
194 <210> SEQ ID NO: 5
195 <211> LENGTH: 29
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Primer HM2K
202 <400> SEQUENCE: 5
203 aaaggtacca gctgtcttc tgtctgtcc 29
205 <210> SEQ ID NO: 6
206 <211> LENGTH: 28
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Primer BST2B
213 <400> SEQUENCE: 6
214 atagtcatac gaagtagatg ccatccag 28
216 <210> SEQ ID NO: 7
217 <211> LENGTH: 2144
218 <212> TYPE: DNA
219 <213> ORGANISM: Homo sapiens
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (1)...(2144)
224 <223> OTHER INFORMATION: Nucleotide sequence coding for IRF-2 protein
226 <400> SEQUENCE: 7
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228 gtattggtag cgtaaaaaaaa gcacactgag agggcaccat gccgggtggaa aggatgcgca 120
229 tgcggccgtg gctggaggag cagataaaact ccaacacgt cccggggctc aagtggctta 180
230 acaaggaaaa gaagatttt cagatcccgt ggtatgcatgc ggctagacat gggtggatg 240
231 tggaaaaaaa tgccaccactc ttttagaaacc gggcaatcca tacagggaaag catcaaccag 300
232 gagtagataa acctgatccc aaaacatgga aggcgaattt cagatgcgcc atgaattcct 360
233 tgcctgatat tgaagaagtc aaggataaaa gcataaaagaa agggaaataat gccttcaggg 420
234 tctaccgaat gctggcccta tcagaacggc cttctaaagaa agggaaagaaa ccaaagacag 480
235 aaaaagaaga caaaatgttaa cacaatcaagc aagaaccagt tgagtcatct ctggggctta 540
236 gtaatggagt aagtgtatctt tctcctgagt atgcggctt gacttcaact ataaaaaaatg 600
237 aagtggatag tacgtgaac atcatagttg tagacagtc ccatctggac agcaacattg 660
238 agaatcaaga gattgtcacc aatccgcag acatggcca agttgttagag gtgaccactg 720
239 agagcgacgca gcagccggtc agcatgagcg agctctaccc tctgcagatc tccccctgtgt 780

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**Input Set : A:\35029-20013.00.txt**  
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240 cttcctatgc agaaaagcgaa acgactgata gtgtgcccag cgatgaagag agtggccgagg 840  
 241 ggcggccaca ctggcggaag aggaatattg aaggcaaaca gtacctcagc aacatgggga 900  
 242 ctcgaggctc ctacctgctg cccggcatgg cgtccttcgt cacttccaac aaaccggacc 960  
 243 tccaggtcac catcaaagag gagagcaatc cggtgcctta caacagctcc tggccccctt 1020  
 244 ttcaagaccc cccctttct tcctccatga ccccagcattc cagcagcagt cggccagacc 1080  
 245 gggagacccg ggccagcgtc atcaagaaaa catcgatat cacccaggcc cgcgtcaaga 1140  
 246 gctgttaagc ctctgactct ccgcgggtgt tggtgggct tcttggttt gttttgtgt 1200  
 247 ttgtttgtat ttatTTTT tctctctgac acctattta gacaatcta agggaaaaag 1260  
 248 cttgacaat agaacattga ttgctgtgtc caactccagt acctggagct tctctttaac 1320  
 249 tcaggactcc agccattgg tagacgtgtg ttcttagagc ctgctggatc tcccaggct 1380  
 250 actcactcaa gttcaaggac caacaaggcc agtggagggtg ctgcattgcc tgcggtaag 1440  
 251 gccagcaagg tggagtggat gcctcagaac ggacgagata atgtgaacta gctggattt 1500  
 252 ttattcttg tgaatatgtt cataggcagc actagcgaca ttgcagtgt cttctgcacc 1560  
 253 ttatcttaaa gcacttacag ataggccttc ttgtgatctt gctctatctc acagcacact 1620  
 254 cagcaccccc ttctctgccc attccccagc ctctcttctt atcccatccc atcccatccc 1680  
 255 atcccatccc atcccatccc gctctttcc tactttctt tccctcaaag cttccattcc 1740  
 256 acatccggag gagaagaagg aaatgaattt ctctacagat gtcccatttt cagactgctt 1800  
 257 taaaaaaaaat ccttctaattc tgctatgctt gaatgccacg cggtacaaag gaaaaagtat 1860  
 258 catggaaata ttatgcaaat tcccagattt gaagacaaaa atactctaattt tctaaccaga 1920  
 259 gcaagctttt ttatTTTT tacaggggaa tattttattc aaggtaaaaat tctaaataaa 1980  
 260 atataattgt tttttatctt ttctacagca aatttataat tttaagattc cttttcttgt 2040  
 261 ttatcagcag ttgttattac atccttgcgg cacattttt tttaattttt taaaggtgaa 2100  
 262 aaaagctttt atgagctcat ctagcaatca gattttcctg tgga 2144  
 264 <210> SEQ ID NO: .8  
 265 <211> LENGTH: 349  
 266 <212> TYPE: PRT  
 267 <213> ORGANISM: Homo sapiens  
 269 <220> FEATURE:  
 270 <221> NAME/KEY: UNSURE  
 271 <222> LOCATION: (0)...(0)  
 272 <223> OTHER INFORMATION: Amino acid sequence of IRF-2 protein  
 274 <400> SEQUENCE: 8  
 275 Met Pro Val Glu Arg Met Arg Met Arg Pro Trp Leu Glu Glu Gln Ile  
 276 1 5 10 15  
 277 Asn Ser Asn Thr Ile Pro Gly Leu Lys Trp Leu Asn Lys Glu Lys Lys  
 278 20 25 30  
 279 Ile Phe Gln Ile Pro Trp Met His Ala Ala Arg His Gly Trp Asp Val  
 280 35 40 45  
 281 Glu Lys Asp Ala Pro Leu Phe Arg Asn Arg Ala Ile His Thr Gly Lys  
 282 50 55 60  
 283 His Gln Pro Gly Val Asp Lys Pro Asp Pro Lys Thr Trp Lys Ala Asn  
 284 65 70 75 80  
 285 Phe Arg Cys Ala Met Asn Ser Leu Pro Asp Ile Glu Glu Val Lys Asp  
 286 85 90 95  
 287 Lys Ser Ile Lys Lys Gly Asn Asn Ala Phe Arg Val Tyr Arg Met Leu  
 288 100 105 110  
 289 Pro Leu Ser Glu Arg Pro Ser Lys Lys Gly Lys Lys Pro Lys Thr Glu  
 290 115 120 125  
 291 Lys Glu Asp Lys Val Lys His Ile Lys Gln Glu Pro Val Glu Ser Ser

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/069,290A

DATE: 01/29/2003  
TIME: 14:56:28

Input Set : A:\35029-20013.00.txt  
Output Set: N:\CRF4\01292003\J069290A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 3,5,6,7  
Seq#:10; N Pos. 1,6,7

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**VERIFICATION SUMMARY**

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Input Set : A:\35029-20013.00.txt

Output Set: N:\CRF4\01292003\J069290A.raw

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:144 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3  
L:329 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:333 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9  
L:334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:345 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:349 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:10  
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

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